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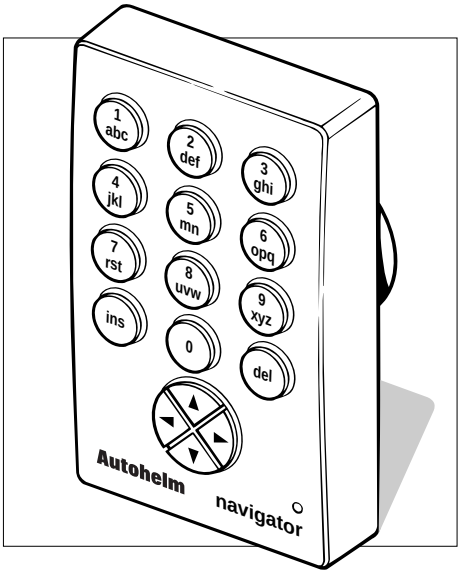
Raytheon Electronics

Autohelm

ST80 Navigator Keypad

Operation Manual



Package Contents

1. Navigator keypad
2. Thumb nuts (2)
3. Threaded fixing studs (2)
4. White sun cover
5. SeaTalk cable
6. Installation template
7. Operation manual
8. Warranty card
9. Operation cue card
10. Keypad installation guide

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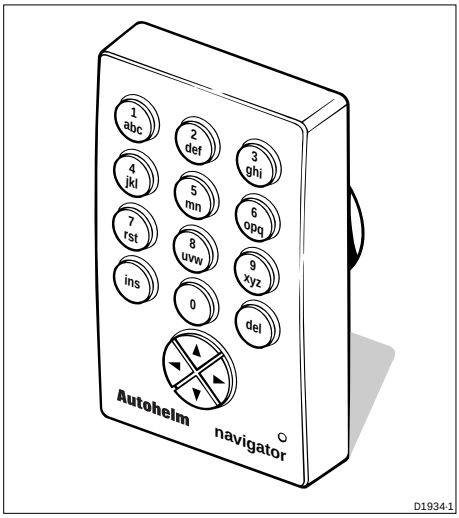
Chapter 1: Introduction

Introduction

The Navigator is an extension of the ST80 Masterview keypad. The unit consists of a multidirectional cursor control pad and twelve keys dedicated to alphanumeric data entry, insert and delete.

These dedicated keys greatly increase the speed at which common navigational tasks, such as waypoint creation using Lat/Lon, ranges and bearings, can be accomplished.

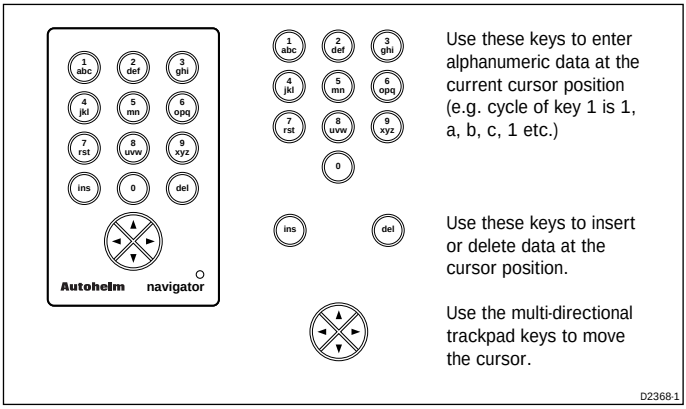


The Navigator keypad is permanently illuminated for ultimate clarity in all lighting conditions. The brightness of the keys is governed by display head illumination settings — the brighter the display the brighter the keys.

Chapter 2: Operation

2.1Basic Operation

The Navigator allows you to quickly enter or edit navigational data displayed on a Masterview display head, using the alphanumeric, insert, delete and trackpad keys.


1 abc
2 def
3 ghi
4 jkl
5 mn
6 opq
7 rst
8 uvw
9 xyz
ins
0
del
Autohelm navigator
Use these keys to enter alphanumeric data at the current cursor position (e.g. cycle key 1 is 1, a, b, c, 1 etc.)
Use these keys to insert or delete data at the cursor position.
Use the multi-directional trackpad keys to move the cursor.
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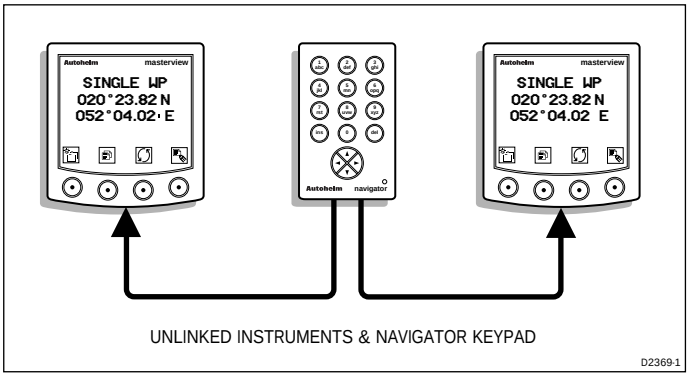
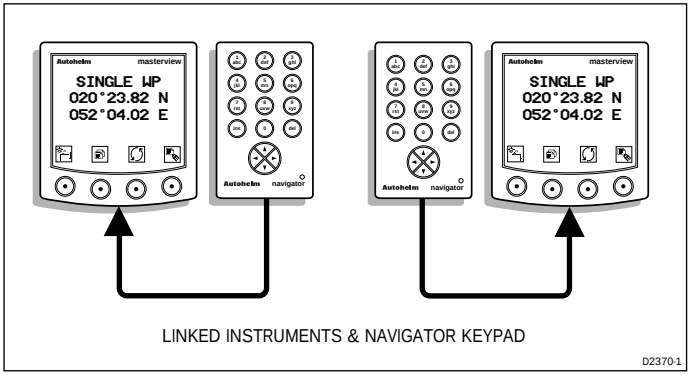
The Navigator can operate in one of two modes: unlinked or linked. The factory default is unlinked. In this mode **all** Masterview instruments respond to button presses on the Navigator.



This mode ensures that a newly installed units operate together as soon as they are powered up.

For users with more than one Masterview, the Navigator can be configured so that it is dedicated to just one Masterview – this is referred to as linking.



LINKED INSTRUMENTS & NAVIGATOR KEYPAD

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For details on how to link Navigator and Masterview modules, please refer to the Masterview setup chapter.

2.2 General Operating Information

- A short beep is emitted when a key is pressed.
- The small red LED glows when the keypad is operational.
- The brightness of the keypad illumination and power LED is governed by the system illumination setting.

Chapter 3: Problem Solving & Maintenance

3.1 Problem Solving

Keypad does not operate - power LED not illuminated

- Make sure the cable connecting the keypad to SeaTalk is connected properly.
- Make sure the cable is not damaged. Replace the cable if it is damaged.

Navigator operates all Masterview display heads

- Display heads and keypad are not linked. Please refer to the Masterview manual for linking details.

Navigator does not operate Masterview display head

- Keypad has been previously linked to another Masterview. Enter link mode to create a link between the keypad and display head.

3.2 Maintenance

- Periodically examine cables for signs of damage. Replace any damaged cables.
- Always fit the protective sun cover when the keypad is not in use.
- If the keypad needs to be cleaned, use a moist lint-free cloth. Chemical cleaning agents or abrasive compounds must not to be used.

Chapter 4: EMC & Servicing Guidelines

4.1 Important information

All Autohelm equipment and accessories are designed to the best industry standards for use in the leisure marine environment.

Their design and manufacture conforms to the appropriate Electromagnetic Compatibility (EMC) standards, but good installation is required to ensure that performance is not compromised. Although every effort has been taken to ensure that they will perform under all conditions, it is important to understand what factors could affect the operation of the product.

4.2 Installation

To avoid the risk of operating problems, all Autohelm equipment and cables connected to it should be:

- At least 1m (3 feet) from any equipment transmitting or cables carrying radio signals, e.g., VHF radios, cables and antennas. In the case of SSB radios, the distance should be increased to 2m (7ft).
- More than 2m (6ft) from the path of a radar beam. A radar beam can normally be assumed to spread 20 degrees above and below the radiating element.
- The equipment should be supplied from a different battery than the one used for engine start. Voltage drops below 10V in the power supply to our products can cause the equipment to reset. This will not damage the equipment, but will cause the loss of some information and can change the operating mode.
- Genuine Autohelm cables should be used at all times. Cutting and rejoining these cables can compromise EMC performance and so should be avoided unless doing so is detailed in the installation manual.
- If a suppression ferrite is attached to a cable, this ferrite should not be removed. If the ferrite has to be removed during installation it must be reassembled in the same position.

4.3 Check Before Going to Sea

- Always check the installation before going to sea to make sure that it is not affected by radio transmissions, engine starting etc..
- In some installations, it may not be possible to prevent the equipment from being affected by external influences. In general this will not damage the equipment but can lead to it resetting, or momentarily may result in faulty operation.

4.4 Servicing and Safety

- Autohelm equipment should be serviced only by authorised Autohelm service engineers. They will ensure that service procedures and replacement parts used will not affect performance. There are no user serviceable parts in any Autohelm product.
- Some products generate high voltages, and so never handle the cables/connectors when power is being supplied to the equipment.
- Always report any EMC related problem to your nearest Autohelm dealer. We will use any such information to improve our quality standards.

Chapter 5: Specification

Dimensions:	110 x 68 x 17mm (4.33 x 2.67 x 0.66in)
Power supply:	10 to 16V DC
Current consumption:	150mA illumination fully on 80mA at courtesy level
Operating temperature:	-10 to 70°C (14 to 158°F)
Buzzer:	Single tone beep

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